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ABSTRACT

Factors affecting 750 Wyoming public school teachers' response rates to a mail survey examined in this study were: personalization of the cover letter and of the envelope; grade level taught (elementary, junior, or senior high); sex of teacher; and regional characteristics (rural area, small town, or large town). Two experimental treatments were used, varying the personalization used in mailing the questionnaire. The six-page instrument concerned the use of achievement tests in the classroom. Two follow-ups were sent. The overall response rate was an acceptable 80 per cent. A log linear model was used to analyze the effects of five variables on survey returns: personalized salutation, original signature, grade level taught, sex, and population of the school's location. The response rate was significantly higher from rural areas and small towns than from larger towns. The personalization aspects did not significantly affect response rates, but an interactive effect was suggested. There were no significant effects of sex or of grade level taught. However, there were differential responses to the first, second, and third mailings by geographic locale, sex, and grade level taught. General conclusions regarding respondent characteristics would be potentially dangerous, without considering the number of follow-ups as a factor. (GDC)

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THE EFFECTS OF ASPECTS OF PERSONALIZATION, SEX, LOCALE, AND LEVEL TAUGHT ON EDUCATORS' RESPONSES TO A MAIL SURVEY*

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ABSTRACT

Two aspects of personalization of cover letters and envelopes were varied to test the effects on responses to a mail survey of public school teachers. In addition, the effects of sex of teacher, grade level taught, and population of the area were evaluated. Questionnaires and two follow-ups were mailed to a random sample of 750 teachers. Significant effects were found for vicinity population but not for personalization, sex, or grade level taught. Significantly higher response rates were obtained from rural areas in comparison to more urban areas. Differential responses to the first, second, and third mailing by sex, level taught, and area population were also found.

The Effects of Aspects of Personalization, Sex, Locale, and Level Taught on Educator's Responses to a Mail Survey

Mail questionnaires have been and continue to be a widely used data collection method in educational research, in large part due to their relative convenience and to the relatively lower expense involved. But, information obtained via questionnaire is not useful unless an acceptable response rate is obtained. Factors affecting response rates to mail questionnaires have been reviewed by several authors (e.g., Goyder, 1982; Heberlein & Baumgartner, 1978) and include variables such as sample characteristics, questionnaire characteristics, sponsorship, and personalization. The present study examined response rates from a sample of public school teachers when aspects of personalization were varied. Response rates were also examined for the sample characteristics of grade level taught, sex, and location of school (rural vs. urban).

Personalization procedures refer to design aspects such as original typing of envelope addresses, personal cover letter salutations, and hand-signed cover letters. Some research has found personalization to have a modest effect on increasing response rates (e.g., Carpenter, 1975; Moore, 1941; Slocum et al., 1956; Yu & Cooper, 1983) while other studies found no effects of personalization (e.g., Childers, Pride, & Ferrell, 1980; Heberlein & Baumgartner, 1978; LaBreque, 1978; Roberts et al., 1978). Typed letters brought a higher response rate than mimeographed letters (Simon, 1967); hand-signed cover letters had no effect according to several researchers (Kawash & Alemoni, 1971; Wellbacher & Walsh, 1952) and a significant positive effect according to another (Linskey, 1965).

Dillman, Dillman and Makela (1984) strongly advocate the use of personalization procedures as part of their total design method for mail surveys, suggesting that personalization will either increase response rates or interact with other variables that will. In contrast, Rucker et al. (1984) found support for the hypothesis that repeated use of personalized mailings may have a negative effect on response rate.

The effects of area population on response rates have also been inconsistent. Dillman et al.(1984) and Sudman and Bradburn (1984) reported higher response rates for people in rural than in urban areas, though results varied by state. Response rates were found to be higher for rural areas in Wyoming in particular (Dillman et al., 1984). Dillman et at. (1974), however, found response rates to vary between rural and urban areas but that the differences were not consistent across states. And, in a study of educators, Altschuld and Lower (1984) found a higher initial return rate from larger than from smaller schools.

Sex and grade level taught have not been as extensively researched and reported as have other sample characteristics. However, Goyder's (1982) review suggests that males return surveys more frequently than females. Altschuld and Lower (1984) found no differences in return rates for elementary vs. secondary schools.

Consistent with the general results of previous research, the following research hypotheses were tested in this study:

H1: Personalized mailings provide a significantly higher response rate.
(a) Personalization of the cover letter has a significant effect.
(b) Personalization of the envelope has a significant effect.
(c) The interactive effect is significant.

H2: Response rates are significantly higher from teachers in rural than in urban areas.

H3: Response rates for males are significantly higher than for females.

H4: Response rate varies significantly with grade level taught.

METHODS

Subjects

A systematic random sample was chosen from the State Department of Education list of educators in the State of Wyoming. A total of 750 teachers' names were drawn. The sample was composed of elementary (48%), junior high (24%), and senior high teachers (28%). They were located in rural areas (22% in areas of less than 1,000 population), small towns (52% in towns from 1,000-9,999), and larger towns (27% in towns of more than 10,000). Of the sample, 64% were female and 36% were male.

Procedures

Two experimental treatments were employed, with subjects randomly assigned to each. First, salutations on the cover letter were varied with one form being "Dear Educator" typed and xeroxed (50%). The more personalized form had the addressee's surname written in by hand (50%).

Second, the letter was either signed by hand in blue ink (51%) or had a xeroxed signature (49%).

A three-page (double-sided) survey instrument asking about the use of achievement tests in classrooms was sent to all those in the sample with a cover letter and a stamped (metered) return envelope. Two weeks later, a follow-up letter was sent; two weeks after this, a second survey form, return envelope, and cover letter were mailed. Return rates were as follows: first mailing--51%, first follow-up--13%, second follow-up--10%. An additional 8% of returns indicated the survey form to be inappropriate (e.g., school librarian, resource room supervisor), or undeliverable as addressed.

Data were analyzed using a log-linear model to assess the effects of five variables on survey returns. The variables were salutation, signature, level taught, sex, and population of the place where the school was located. A true experimental (2x2x3x2x3 factorial) design was used, with the first two variables representing the treatments. Subsidiary analyses were performed using simple 2-way tables with χ^2 values.

RESULTS

A significant effect ($\chi^2 = 9.31$, $p<.01$) on final survey return rates was found for locale with a higher response rate from areas with lower populations. There were no significant effects of experimental variables or of sex or grade level taught. The interaction effect of salutation and signature approached significance ($\chi^2 = 3.04$, $p<.08$). (See Tables 1 and 2.)

(Tables 1 and 2 here)

There were also significant differences in responses to the first, second, and third mailings by locale (χ^2 = 12.74, p<.02) and by sex (χ^2 = 6.04, p<.05). Response rate to the initial mailing was higher for towns than for rural areas. Responses to the first follow-up were greater for larger towns than for rural areas or smaller towns, and, finally, responses to the second follow-up were greater for the rural areas (Table 3). Males responded to the initial mailing at a higher rate than females, with females responding to the first follow-up at a higher rate (Table 3).

(Table 3 about here)

DISCUSSION

The overall response rate (80%) of teachers to the survey administered was within acceptable limits. Consistent with previous research, the response rate was higher from rural areas and smaller towns than from larger towns. The aspects of personalization which were varied had no significant effect on response rates, though there was some indication of interactive effects. Fewer surveys were returned if there was an incongruency in salutation and signature; that is, if one were personalized and the other not. But, this interaction was not significant at p<.05. If replicated in other work, however, this result would suggest that personalization either be used in full--personalized salutation, signature, and possibly envelope address, and postage stamp--or not be used at all. This suggestion would be consistent with the Dillman et al. (1984) total design method. Response rates in this study were essentially

equivalent for personalization and no personalization. Only two aspects of personalization were varied, though. A larger scale study could vary four or five aspects of personalization while still maintaining sufficient power to detect differences. Clearly, personalization of surveys costs both money and time. If no substantial improvement in response rate is seen, then this time and money perhaps may better be spent in other activities, such as continuing to follow-up nonrespondents.

Locale and sex differences in response rates to first, second, and third mailings indicate the potential dangers of drawing general conclusions regarding respondent characteristics without considering the number of follow-ups as a factor.

Results of this study are limited by the factors considered and the sample size. The population was restricted to public school teachers only. Different results might be obtained if other populations in other areas were to be sampled.

REFERENCES

Altschuld, J.W., & Lower, M.A. (1984). Improving mailed questionnaires: analysis of a 96 percent return rate. In D.C. Lockhart (Ed.), Making effective use of mailed questionnaires. San Francisco: Jossey-Bass.

Carpenter, E.H. (1975). Personalizing mail surveys: a replication and reassessment. Public Opinion Quarterly, 38, 614.

Childers, T.L., Pride, W.M., & Ferrell, O.C. (1980). A reassessment of the effects of appeals on response to mail surveys. Journal of Marketing Research, 17, 365-370.

Dillman, D.A., Christenson,J.A., Carpenter, E.H., & Brooks, R.M. (1974). Increasing mail questionnaire response: a four state comparison. American Sociological Review, 39, 744-775.

Dillman, D.A., Dillman, J.J., & Makela, C.J. (1984). The importance of adhering to details of the total design method (TDM) for mail surveys. In D.C. Lockhart (Ed.), Making effective use of mailed questionnaires. San Francisco: Jossey-Bass.

Goyder, J.C. (1982). Further evidence on factors affecting response rates to mailed questionnaires. American Sociological Review, 47, 550-553.

Heberlein, T.A., & Baumgartner, R. (1978). Factors affecting response rates to mailed questionnaires: a quantitative analysis of the published literature. American Sociological Review, 43, 447-462.

Kawash, M., & Alemoni, L. (1971). Effect of personal signature on the initial rate of return of a mailed questionnaire. Journal of Applied Psychology, 55, 589-592.

LaBreque, D.P. (1978). A response rate experiment using mail questionnaires. Journal of Marketing, 42, 82-83.

Linsky, A.S. (1965). A factorial experiment in inducing responses to a mail questionnaire. Sociology and Social Research, 49, 183-189.

Moore, C.C. (1941). Increasing returns from questionnaires. Journal of Educational Research, 35, 138-141.

Roberts, R.E., McCrory, O.F., & Forthofer, R.N. (1978). Further evidence on using a deadline to stimulate responses to a mail survey. Public Opinion Quarterly, 42, 407-410.

Rucker, M., Hughes, R., Thompson, R., Harrison, A., & Vanderlip, N. (1984). Personalization of mail surveys: too much of a good thing? Educational and Psychological Measurement, 44, 893-905.

Simon, R. (1967). Responses to personal and form letters in mail surveys. Journal of Advertising Research, 7, 28-30.

Slocum, W.L., Empey, L.T., & Swanson, H.S. (1956). Increasing response to questionnaires and structured interviews. American Sociological Review, 21, 221-225.

Sudman, S., & Bradburn, N. (1984). Improving mailed questionnaire design. In D.C. Lockhart (Ed.), Making effective use of mailed questionnaires. San Francisco: Jossey Bass.

Weilbacher, W., & Walsh, H.R. (1952). Mail questionnaires and the personalized letter of transmittal. Journal of Marketing, 16, 331-336.

Table 1. Response vs. no response by Locale

	Locale		
	Rural	Small Town	Larger Town
Response			
Count	117	297	131
Row percent	21.5	54.5	24.0
Column percent	81.3	83.0	72.8
No response			
Count	27	61	49
Row percent	19.7	44.5	35.8
Column percent	18.8	17.0	27.2

Table 2. Response vs. no response by salutation and signature

	Signature			
	Handsigned		Xeroxed	
Salutation:	Xeroxed	Personal	Xeroxed	Personal
Response				
Count	135	130	138	146
Percent of total	19.7	18.9	20.1	21.3
Nonresponse				
Count	41	26	28	42
Percent of total	6.1	3.7	4.1	6.1

Table 3. Returns by mailing, locale, and sex

	Locale			Sex	
	Rural	Small Town	Larger Town	Male	Female
Initial mailing					
Count	69	214	91	192	220
Row percent	18.4	57.2	24.3	39.2	60.8
Column percent	59.0	72.1	69.5	74.0	65.7
First follow-up					
Count	23	47	29	24	70
Row percent	23.2	47.5	29.3	25.5	74.5
Column percent	19.7	15.8	22.1	12.5	20.9
Second follow-up					
Count	25	36	11	26	45
Row percent	34.7	50.0	15.3	36.6	63.4
Column percent	21.4	12.1	8.4	13.5	13.5